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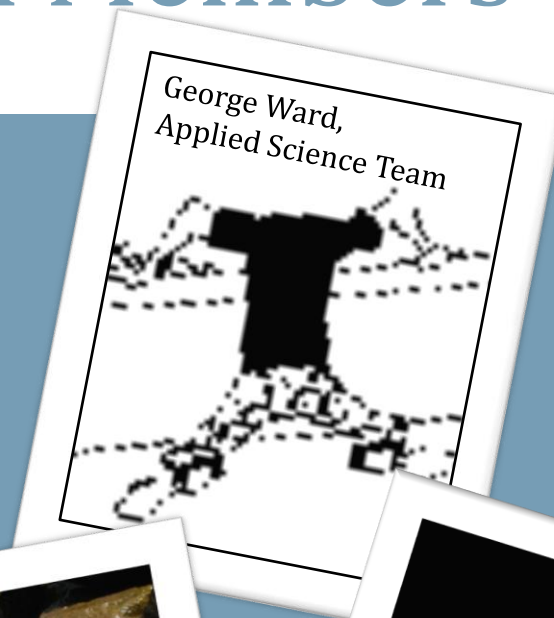
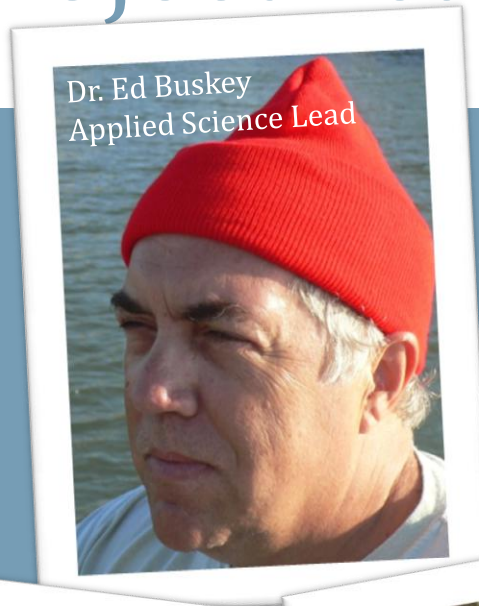
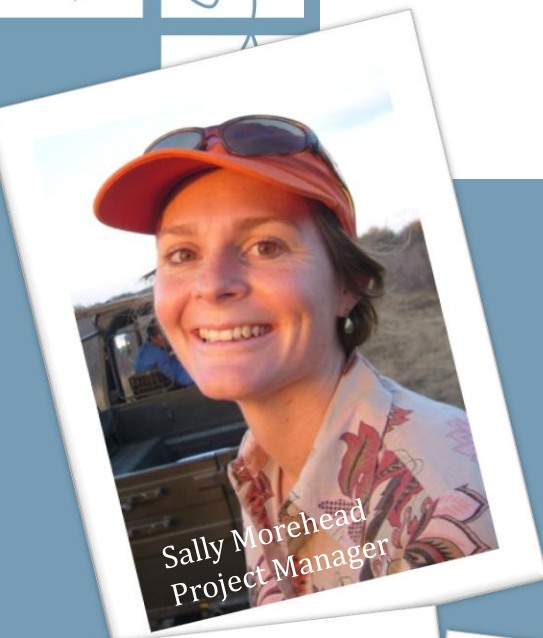
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Freshwater Inflow:

Determining flow regimes in the face of land use change, climate change, and other unknowns

Project Team Members

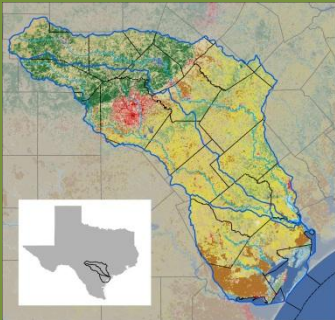


Our Project . . .

Freshwater inflows: Determining flow regimes in the face of land use, climate change, and other unknowns

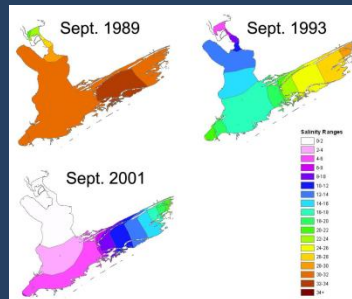
OBJECTIVE 1

Examine the effects of land use and climate change on freshwater inflows to the Guadalupe and Mission-Aransas.



OBJECTIVE 2

Improve inputs to the TxBLEND salinity model of the Texas Water Development Board.



OBJECTIVE 3

Collaborate with intended users to identify and conduct a priority research project related to a focal species mentioned in the BBEST report.

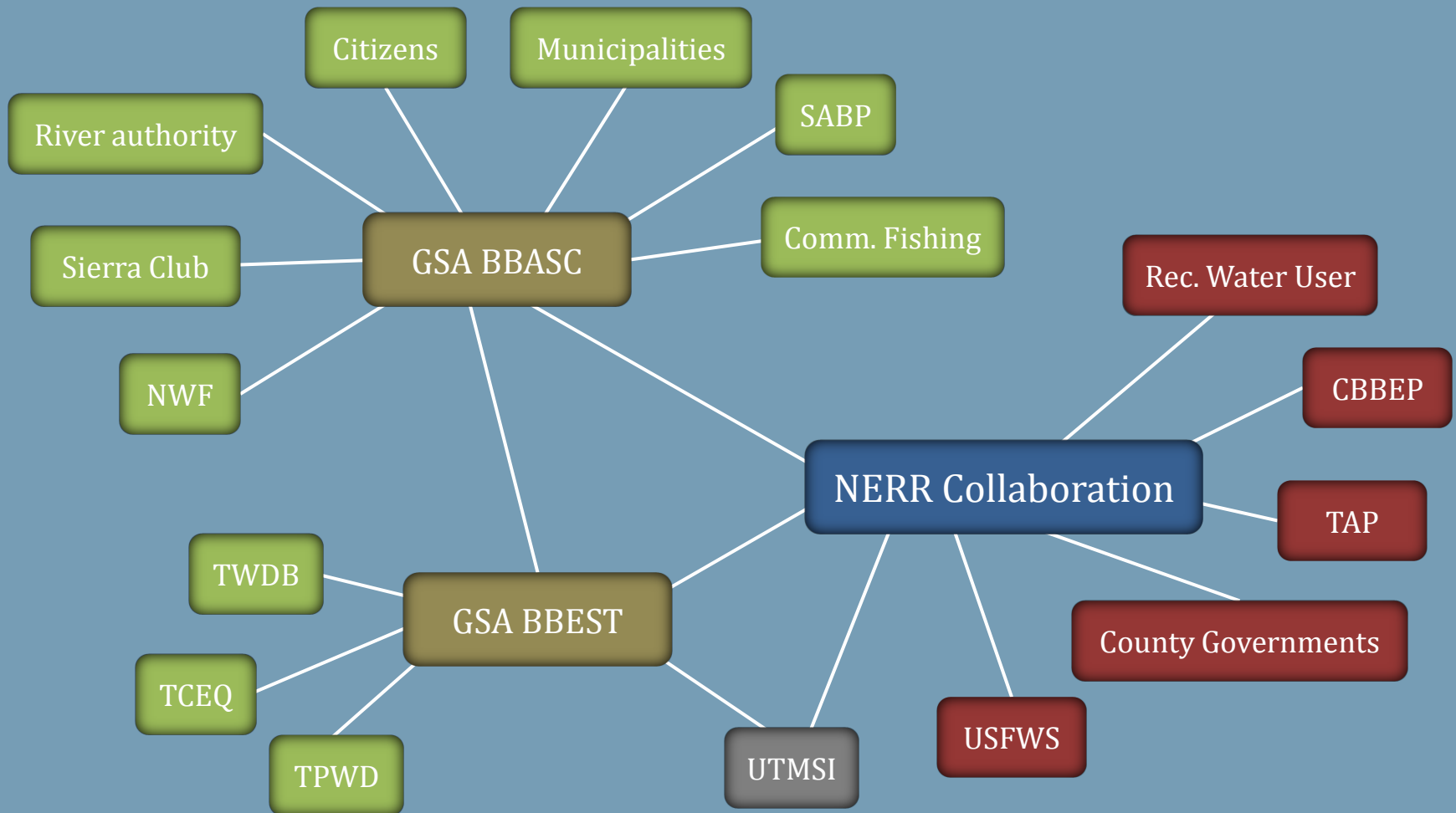


OBJECTIVE 4

Develop shared systems learning among the local stakeholders and scientists for construction of a system dynamics model.



The Collaborative



Land Use & Climate Change

Objective 1



Water Usage

CommunityViz

- Current land use
- Building/dwelling units
- Projected areas of future growth
- Population projections

Circulation Model

- Bay bathymetry
- Rainfall & evaporation
- Wind
- Freshwater from rivers
- Exchange with bays

Scenarios

Land Use
Climate Change

Runoff

N-SPECT

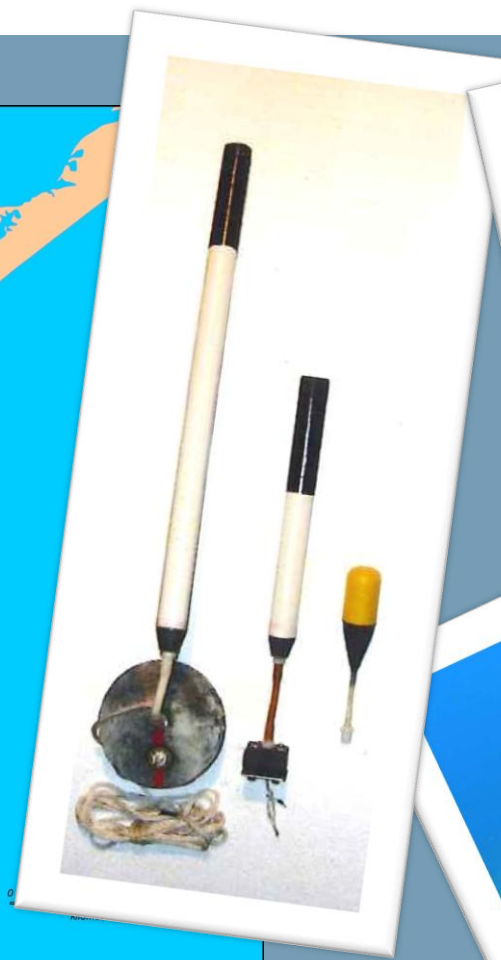
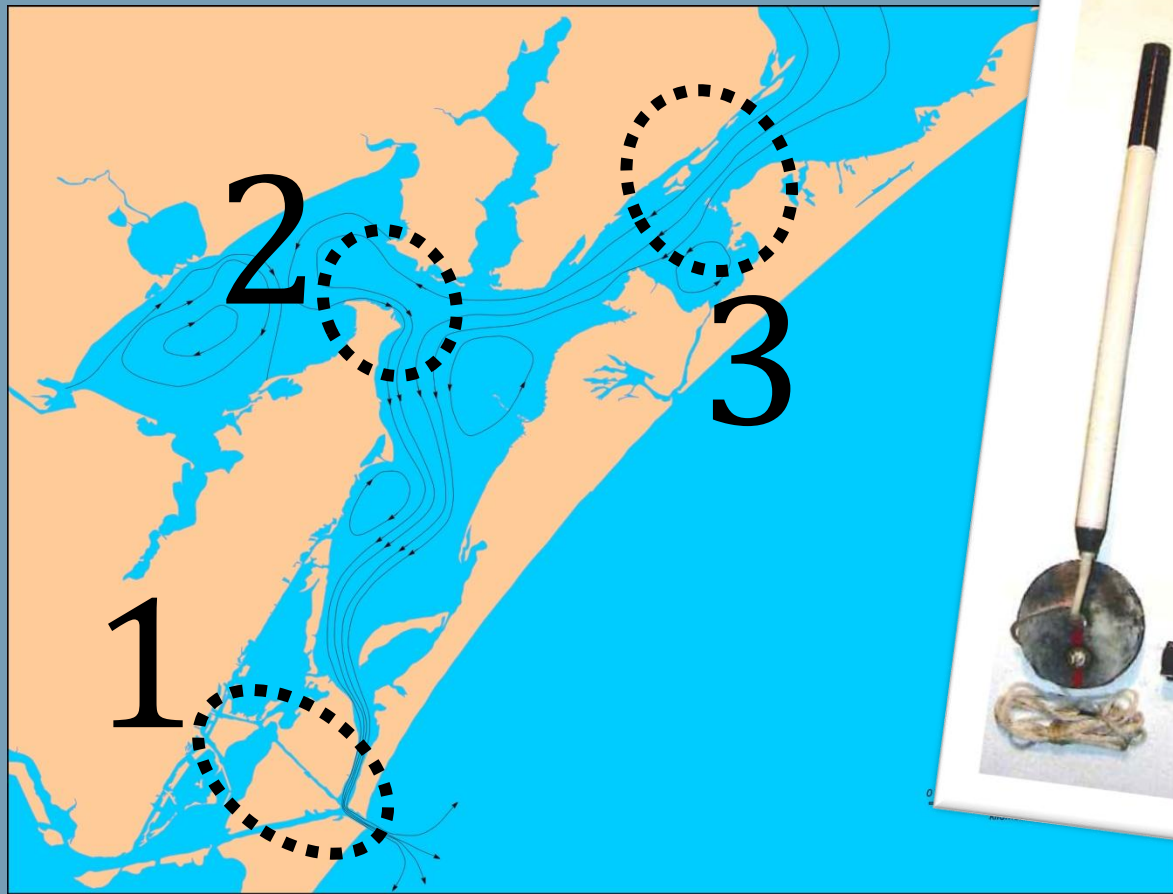
- Land use/land cover
- Elevation
- Soils
- Precipitation

Vista

- Species distribution
- Salinity
- Condition model to evaluate compatibility

Circulation

Objective 2



Focal Species Study

Objective 3

*Guadalupe, San Antonio, Mission, & Aransas Rivers and
Mission, Copano, Aransas, & San Antonio Bays
Basin & Bay Area Stakeholders Committee (GSA BBASC)*

Work Plan for Adaptive Management

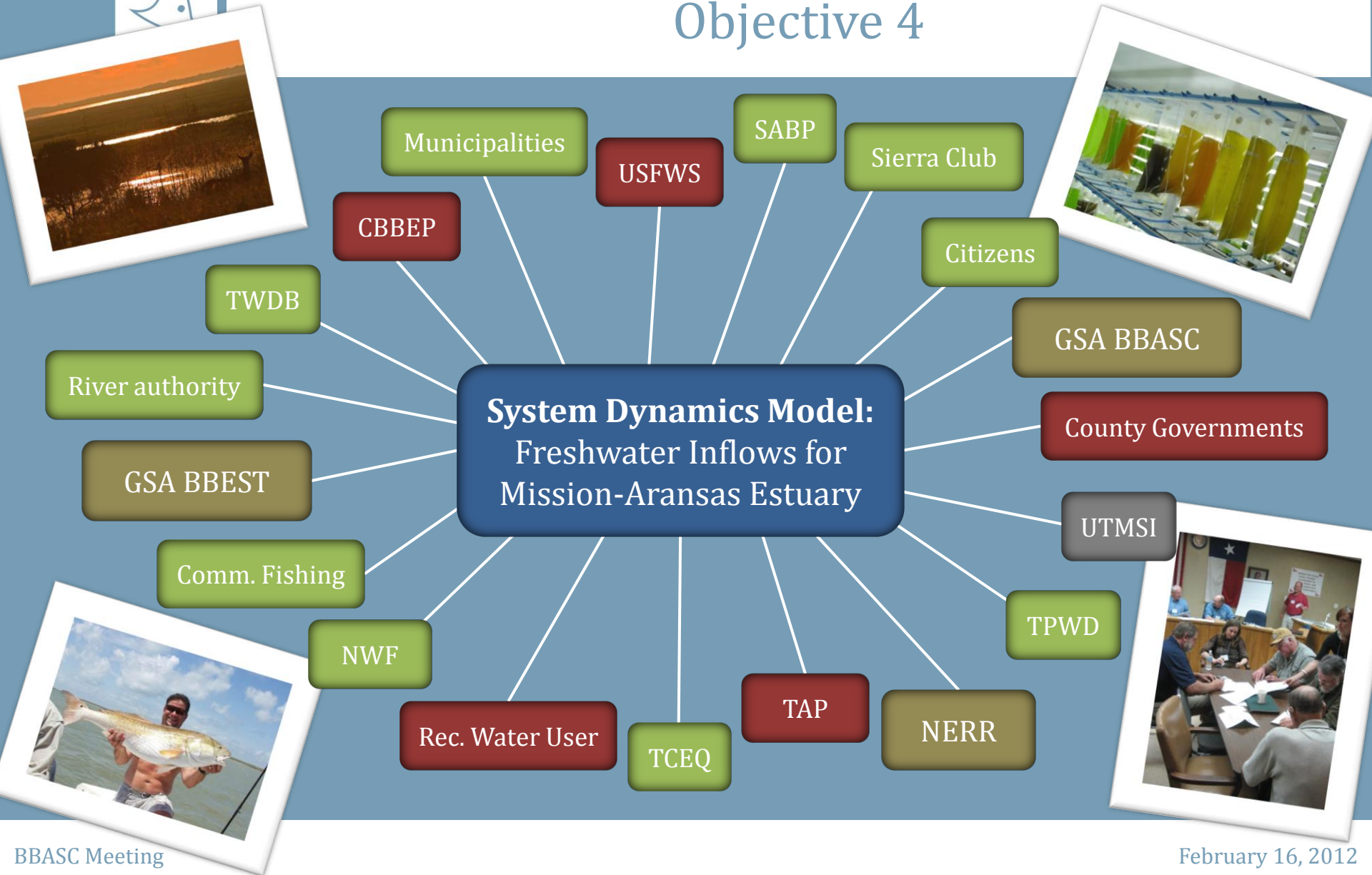
**Compilation of Preliminary Scopes of Work
October 11, 2011**

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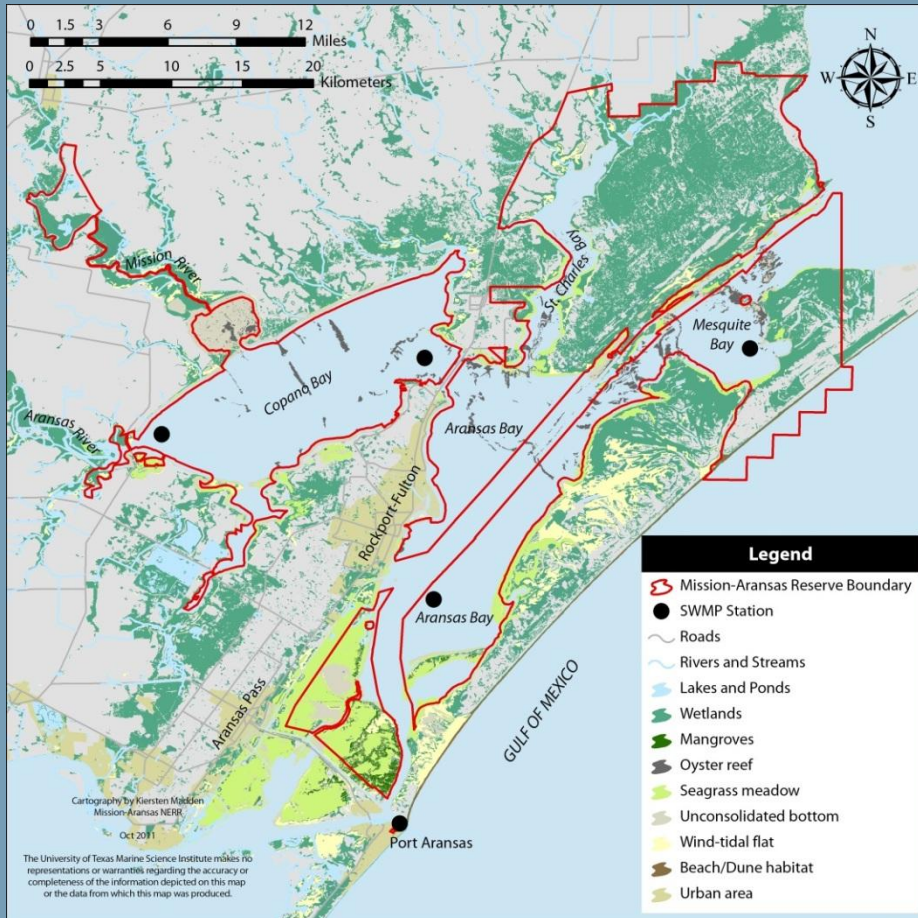
System Dynamics Model

Objective 4



Questions?

Mission-Aransas NERR



The Mission-Aransas NERR brings together scientists, landowners, policy-makers, and the public to ensure that coastal management decisions benefit flora and fauna, water quality, and people.



Research



Stewardship



Education



Training

